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THE WEAR AND TEAR OF LONDON LIFE.

REST AND REPAIR IN LONDON LIFE.

HEALTH-RESORTS AND THEIR USES.

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OF
LONDON LIFE

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BY

ROBSON ROOSE, M.D., F.C.S.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS IN EDINBURGH; AUTHOR OF
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THE WEAR AND TEAR OF LONDON LIFE.

“ ‘ Why, sir, you find no man, at all intellectual, who is willing to leave London. No, sir, when a man is tired of London, he is tired of life; for there is in London all that life can afford, ’ ”—
Boswell's Life of Johnson.

THIS opinion was delivered after an experience of forty years of London life, and when the speaker was close upon his seventieth year. Johnson's dogmatism on this, as on other subjects, was based upon deep conviction; he repeatedly dilates on the advantages of London, its pre-eminence over every other place for variety of enjoyments, for comfort, and for intellectual advantages of all kinds. He never so much as hints at the existence of any possible drawback. It may be taken for granted that Johnson's opinion as to the advantages of living in London is tacitly adopted by many classes of persons at the present day, and with good reason. To the ordinary

Englishman desirous of enjoyment, of intellectual culture, or of professional success, no other place in the civilised world offers equal facilities for compassing the objects of his desire. Even by people who have no particular aims in view, life out of London is not unfrequently regarded as a kind of vegetative existence. A much more important and numerous class, embracing those who are forced by the nature of their avocations to spend nearly all their time in London, are wont to adopt the same opinion, tempered, perhaps, in many cases by an appreciation of the drawbacks attendant upon their mode of life.

Admitting to the full all the advantages, I propose to consider some of those disadvantages connected with London life which are daily becoming more and more prominent. I shall refer more especially, and from a medical point of view, to those evidences of "wear and tear" which are the direct results of over-work, excitement, and anxiety, and which are so often witnessed among statesmen, politicians, and professional men of all classes actively engaged in London. What is the price which so many of them pay for their advantages of position and for their reputation? Besides answering this question, I shall endeavour to point out

how some, at least, of the drawbacks might be obviated.

It is not my intention to re-open the controversy which took place some years ago on the subject of over-work. It was asked by Mr. Greg and others whether society at large was really suffering from an amount of work, physical and mental, injurious to the individual, and therefore to the human race. To this question very diverse answers were given. Some authorities said bluntly that in their opinion more ailments arise from idleness or from want of occupation than from over-work, and that for one instance of mischief arising from the latter cause, half-a-dozen might be met with belonging to the former category. Others, again—probably those who had met with more workers than idlers—expressed a different and a more guarded opinion; at least with reference to the proportionate influence exercised by two such widely different causes. It cannot, I think, be shown that, provided all proper precautions are taken, mental work even of the hardest kind, and pursued for an almost indefinite period, really injures the nervous system of the individual thus occupied. Indeed, as a matter of fact, it is almost invariably followed by an entirely oppo-

site result. The human body is a machine so constructed that work is a necessity for its continued existence and well-being ; the amount of work it is capable of doing is in strict proportion to the power of the mechanism, and while other machines having no power of repair tend to become weaker and worn out by use, the strength and capacity of the nervous and muscular system of the human body are increased by exercise, provided that the latter is regulated by certain well-known laws. Injurious effects resulting from hard work are almost always traceable to neglect of obvious precautions.

There are of course immense differences among men as regards capacity for performing mental work of any kind. Previous training, constitution, and temperament are potent factors in determining the amount which each is capable of doing. Some men can stand an enormous amount of mental strain without any apparent injury ; others, from what may be called, for want of a better term, "weakness of brain," are incapable of anything requiring mental tension. The worst consequences are noticed in people of moderate brain power, who, in the absence of proper training, attempt the performance of severe mental labour. Their case is similar to that of

those who suddenly engage in trials of strength and endurance after an insufficient amount of training, and who either exhaust themselves by overtaxing their nervous energies, or induce disorders of the heart or lungs, or strain of some portion of the muscular system, by the violence of their efforts. When a man is being prepared for great muscular exertion, he undergoes a course of training in which the severity of the work assigned to him is gradually and cautiously increased, and the same rule should be adopted for those whose mental powers are about to be severely taxed. If this condition be fulfilled, if a proper amount of sleep can be obtained, and if the appetite remains at its normal level, the brain will bear almost any amount of *steady strain* in the form of severe mental labour.

With regard to health, it is needless to dilate upon the advantages of the combination of health of body with that of mind. Such a combination when it exists cannot be sufficiently prized. The fact, however, remains that not a little of the brain-work of the world is done by men whose standard of health is extremely low; and a weak and ailing condition of body has been proved to be quite compatible with great ability for severe mental exertion. Such

cases are, however, the exception; their existence serves to demonstrate the compensatory power existent in the human frame.

Ordinary experience teaches us that monotonous mental toil is far more trying than even a greater amount of work of a diversified character. The same law holds good in respect of bodily labour. When all the muscles are exercised, none are specially fatigued, unless the exercise be immoderate in character. But when only one set of muscles is called into play for lengthened periods, weakness or even partial paralysis is a not unfrequent result. The last point, referring to the effect of anxiety and worry, will be more appropriately considered after I have endeavoured to sketch those features of London life which may be said to necessitate an undue amount of wear and tear. There is little doubt that in many cases it is not the amount of work that is mischievous, but the absence of proper regulations, the attempt to carry on simultaneously several different occupations, and the worry and anxiety which such attempts cannot fail to cause. As evidence of the fact that many men at the present day attempt to live three or four lives at once, I will give a few examples out of many that have

come under my notice, taking them from among politicians and the professional classes of the metropolis. There is perhaps little or nothing that is novel in the details I am about to give, but I feel assured that the lessons which may and should be drawn from them are far too much neglected.

I will take for my first sketch the experience of a barrister in good practice. As a general rule, a barrister begins his daily work at his chambers about half-past nine. After a short stay there he passes the next five or six hours in court, either engaged in a case or cases, or waiting for them to come on. While thus waiting he occupies himself with other work, *e.g.* reading briefs, drawing pleadings, &c. If his attendance be not required in court he would be working in his chambers writing opinions, consulting reports and standard authorities in support of such opinions and contentions. Whatever his occupations, he spends but a few minutes over lunch; whether heavy or light it is despatched in the least possible time. His ordinary work detains him at his chambers till seven o'clock, when he goes home to dinner, generally taking with him documents and books to be studied at night. If this were a complete sketch of a barrister's work it would be absurd

to say that any undue amount of wear and tear was necessarily associated therewith. But his legal duties are perhaps the least arduous of those that fall to his lot. As a general rule a barrister, ambitious of rising in his profession, must seek other spheres of activity besides the law-courts. It is almost an absolute necessity that he should enter the House of Commons, and to get there he must expend not a little time and trouble, and make, perhaps, several unsuccessful attempts. As a member he must be in his place at four, or as soon afterwards as he can leave the law-courts. The sittings, of course, vary much in length; important divisions not unfrequently require the attendance of members till two, or even three A.M. When Parliament rises for the vacation the work of the circuit begins, to be varied in some cases by frequent journeys to London for professional purposes. The work of the Attorney or Solicitor-General, or of a leading Queen's Counsel, though in some particulars different from that of the ordinary barrister, is quite as continuous. The law officers of the Crown have, of course, much private legal business to transact in addition to the duties, professional and Parliamentary, connected with their offices. Society, moreover, claims a

share of the successful barrister's time. Other conditions being favourable, to be seen by the public greatly assists the aspirant to success, and when a good position has been attained, the homage which society demands often involves additional and heavier sacrifices. If to these details of a barrister's work be added his correspondence, private and professional, and the duties connected with his home, family, and friends, it is obvious that his brain and nervous system must be exposed to a strain which, unless due care be taken, and the individual be possessed of an unusual share of mental and bodily vigour, is only too likely to induce serious disorder. As in other cases, the fittest survive, but many drop out of the race. To not a few barristers a robust constitution and a powerful *physique* are of more value than any other qualification.

The duties of a judge, though sufficiently engrossing, are of a less arduous character than those just detailed. A judge's work, heavy as it often is at the present day, is carried on with evenness and regularity, and with little or no excitement. It has, moreover, been preceded by a long course of training, but it can be easily shown that a judge's position is no longer one of dignified ease. In London

his duties in court occupy him for five or six hours daily, during which time he must give the closest attention to the evidence and to the arguments of the opposing counsel. He must take notes as a case progresses, and carefully prepare the summing-up for the guidance of the jury. Such a *résumé* is often a perfect model of lucidity and reasoning, and demands the exercise of mental powers of the highest order. Attendance at assizes, the hearing of election petitions, the consideration of appeals and of Crown cases reserved, are the remaining duties which a judge discharges before the public; and if to these be added many social duties which necessarily fall to his share, it must be admitted that the total is sufficient to test to the utmost the fullest vigour both of mind and body.

The daily work of consulting physicians and surgeons in London is scarcely less arduous than that of a barrister, but it is of a more agreeable and far less exciting character. Medical men, too, spend a large portion of their time in their own houses, and the contrast between a physician's study or consulting-room and a barrister's chambers must often attract notice. No one has as yet explained the preference manifested by lawyers (as shown by the

state of their chambers) for dust, darkness, and discomforts in general. Such a state of things would not be allowed to exist in an ordinary dwelling-house inhabited by persons claiming to belong to the civilised classes. A consulting physician in London begins his work soon after nine A.M. He probably has a patient or two to visit at that early hour, and on his return will find others waiting who have been allowed to come before the regular consultation hour. Patients continue to arrive, and are seen in turn until the list is exhausted, a process which is sometimes not completed till one or even two o'clock. Then luncheon must be rapidly despatched, and if the physician or surgeon be connected with the large London hospitals, he must twice a week at least visit the patients under his care. These visits are always made early in the afternoon, and after this duty is discharged there are private patients to be seen at their own houses, consultations to be held, and, in the case of members of a hospital staff, lectures to be delivered perhaps three or four times a week. Consultations in the country take up more or less of a physician's time; these are usually held in the afternoon. By seven or eight o'clock the work is generally over, so far as

attendance on patients is concerned, and after dinner the physician's time is, if he so chooses, at his own disposal. He must, however, keep himself well acquainted with whatever is going on in the medical and scientific world generally. He must therefore devote some time to the medical journals and reviews, and to a perusal of any specially important new book. It generally happens that the evening is the only portion of the day that he can spare for these subjects. Then there are the various medical societies, such as the Medico-Chirurgical, the Medical, the Clinical, &c., meetings of which are held weekly or fortnightly during eight months of the year. Literary labour often makes further demands upon the physician's time, and if he wishes to become popular, he must, like the barrister, pay some attention to the claims of society, and not fail to appear as often as possible at receptions, conversaziones, dinner-parties, &c. A life spent in the manner thus imperfectly sketched has a large share of enjoyment of the best kind : mind and body are kept fully employed, and under favourable conditions at least a fair measure of success is generally attainable. Of course there are drawbacks ; at the beginning, and for some years afterwards, the *res angusta domi*, the

scarcity of patients, and the necessity for keeping up what are called "appearances," often give rise to very serious forebodings, and middle life is not unfrequently reached before the income is found to balance the expenditure.

A glance at the work imposed upon members of Parliament will suffice to show that it involves no ordinary amount of wear and tear. Work begins in the Committee-rooms at noon ; the House assembles at four, and the sittings are often prolonged till after midnight. Readers of the debates, as given in the morning papers, are becoming more and more familiar with the announcement, "The House was still sitting when we went to press" ! A newly-elected member of Parliament has a great deal to learn before he becomes conversant with his duties, and he is fortunate if he finds time to make himself even moderately well acquainted with the Blue Books, papers, &c., which are annually published. Besides his duties at Westminster, he must attend to his constituents, must show himself among them from time to time, and must be ever ready to listen to complaints, suggestions, or even dictates. The work of a Cabinet Minister varies with the office he fills, the state of public business, and accidental circum-

stances. He begins the day by making himself acquainted with the contents of the daily papers, and perhaps by giving a few minutes to his private correspondence. The study of official papers, Blue Books, &c., will occupy him till eleven o'clock, the ordinary time of attendance at his office, where he remains until the meeting of the House to which he belongs. The sittings in the House of Lords are generally very short; they rarely last more than an hour or two. In the House of Commons they are only too apt to run to the opposite extreme. In addition to official work, not a few hours are required for preparing Parliamentary speeches and extra-Parliamentary discussions of various kinds. Besides being in constant communication with his secretaries, a Cabinet Minister has frequently to consult various officials, and to grant interviews to those who can show any cause for requesting them. If in charge of any important measure in Parliament he must be present during every debate upon it, and often make speeches in its support. Replies to questions have to be carefully prepared, assistance being, of course, given by the permanent officials of the department. Attendances at Cabinet Councils and meetings of the Privy Council, at State balls and

concerts, at dinners and meetings of every conceivable kind, absorb a large portion of the time unoccupied in Parliamentary work ; and if to these items be added the multifarious duties of a private character which almost necessarily devolve upon him, it will be readily admitted that the work of a Cabinet Minister at the present day is such as to tax to the utmost even the highest degrees of mental and physical vigour. The diversified character of his work would appear to be its redeeming feature.

To the ordinary member of the House of Commons, and especially to one who is not as yet hardened by experience, disappointment and a sense of weariness must often make themselves keenly felt. Many a man enters upon Parliamentary life under the idea that he has an important mission to fulfil, but session after session passes and he finds himself no nearer to the goal. Meanwhile he has had to listen night after night to an incessant flow of talk, the larger portion of which is unattended by any practical result. Time and energy are alike misapplied and wasted, and though a powerful and huge machine is at work, the results too often appear practically *nil*. There are at times other reasons for disappointment and disgust. Speeches made and votes given

for party purposes in support of measures believed to be mischievous must, in some cases at least, be productive of no ordinary amount of self-contempt.

It may be objected that the instances to which I have referred are of a numerically exceptional character, that these professional classes constitute a small minority of the population, and that the toil in which they are engaged is very different from that which occupies the remainder of the community. It would not be difficult to show that the differences are those of kind rather than of degree. Evidences of work being carried on at high pressure meet us at every turn. I need only refer to the over-work in elementary schools, to the "cramming" for competitive examinations, and to the constantly increasing difficulty of the questions as shown by the large number of candidates rejected at public examinations of all kinds. Even in our recreations there are evidences of a similar spirit. In fact, we take pains to turn play itself into work. The best and most popular of our national games, as played during the last few seasons, must often have been anything but a recreation (in the true sense of the word) to those engaged in it. If we turn to commercial life, the same features confront us. What is trade at

the present day but competition in its severest forms? Incessant struggles to get on, trampling, crushing, elbowing, and treading on each other's heels, are manifest symptoms of the present phase of industrial progress. He who does not move with the crowd is thrust back by the violence of others who put themselves forward.

To the question whether any penalties are attached to this manner of living, only one answer can be given. Every age is characterised by the presence or prevalence of special disorders of health which have a more or less obvious causation. At the present day "want of tone" is the characteristic feature of disorders in general, and in none is it more obvious than in those which peculiarly affect official and professional men working at high pressure. As might be expected, the signs of this "want of tone," or weakening of the nervous system, vary in different persons; but the presence of certain symptoms may be regarded as a test of the actual condition. Of these sleeplessness is the most important; if allowed to continue, while the individual endeavours to perform his usual tasks, grave disorder of the nervous machinery must soon set in. The restoration of energy, which sleep alone can afford, is necessary

for the maintenance of nervous vigour ; and whereas the muscular system, if over-taxed, at last refuses to work, the brain under similar circumstances too frequently refuses to rest. The sufferer, instead of trying to remove or lessen the cause of his sleeplessness, comforts himself with the hope that it will soon disappear, or else has recourse to alcohol, morphia, the bromides, chloral, &c. Valuable and necessary as these remedies often are (I refer especially to the drugs), there can be no question as to the mischief which attends their frequent use, and there is much reason to fear that their employment in the absence of any medical authority is largely on the increase. Many of the "proprietary articles" sold by druggists, and in great demand at the present day, owe their efficacy to one or more of these powerful drugs. Not a few deaths have been caused by their use, and in a still larger number of cases they have helped to produce the fatal result. Sleeplessness is almost always accompanied by indigestion in some one or other of its Protean forms, and the two conditions react upon and aggravate each other. If rest cannot be obtained, and if the vital machine cannot be supplied with a due amount of fuel, and, moreover, fails to utilise that which is supplied, mental

and bodily collapse cannot be far distant. The details of the downward process vary, but the result is much the same in all cases. Sleeplessness and loss of appetite are followed by loss of flesh and strength, nervous irritability alternating with depression, palpitation, and other derangements of the heart, especially at night, and many of those symptoms grouped together under the old term, "hypochondriasis." When this stage has been reached "the borderlands of insanity" are within measurable distance, even if they have not already been reached.

The advocates of what is popularly known as "progress" at the present day will doubtless be surprised at learning (from a distinguished American physician) that the number of the insane is greater in a community in proportion to the political and religious freedom of the population; that is, to the opportunity they enjoy of working out their own purposes, whether in relation to this world or the next, in the manner most agreeable to themselves. The explanation, of course, is that in such communities the causes of insanity are always numerous and widespread. If Dr. Wood's opinion be well founded, the prospect, so far as this country is concerned, must appal those who are already aware of

the marked increase of mental disorder. The fact may, perhaps, constitute a weighty argument in favour of more frequent periods of rest, if not of thankfulness. We live in an age when preventive medicine has achieved its greatest triumphs, but the prevention of undue mental strain, of anxiety, excitement, and disappointment consequent upon struggles for power, influence, or wealth cannot be reduced to a system or effected by public authority. Individuals, however, might do something to lessen the wear and tear of modern life. A certain amount of anxiety, the sensation which Dr. Hughlings Jackson has happily described as "fright spread out thin," is, of course, unavoidable; but a much larger proportion results from circumstances for the most part really under our own control, but which we strive to exaggerate and multiply. Many a man might ask himself whether the game he is playing is really worth the candle, and whether less bustle and hurry, or even one of the quieter walks of life, would not, after all, be much more conducive to happiness than a constant whirl of excitement and anxiety. There is no exaggeration in Mr. Greg's remark that "a life without leisure and without pause—a life of haste and excitement—a life so full

that we have no time to reflect where we have been and where we intend to go, what we have done and what we plan to do, can scarcely be deemed an adequate or worthy life."

Such is the life led by far too many at the present day, and its effects are only too manifest. One effect of this high-pressure existence is that it leaves even the successful man who has gained much to retire *upon*, nothing to retire *to*; for literature, science, domestic ties, philanthropic interests, nature itself, have all been neglected and lost sight of during the mad rush and struggle of the last thirty years, and these are treasures the key to which soon grows rusty, and friends once slighted cannot be whistled back at will. It is, after all, nothing to the purpose to say that more mischief is caused by idleness than by excessive work. Idleness is an evil, and deserves to be punished; work is, or ought to be, a blessing. But is there no middle course between dull stagnation and those results of excessive pressure which Mr. Gladstone has termed "moral dissipation"? Perhaps one of the worst features of the present day is the contempt for that *aurea mediocritas* which, always praised but rarely pursued, is yet assuredly not beyond the reach of those who make it their ideal.

REST AND REPAIR IN LONDON LIFE.

By way of supplementing my remarks on the wear and tear of London life, I propose to offer a few suggestions as to the means whereby these evils might be moderated or lessened. I do not pretend to say that I know of any agent capable of arresting that constant expenditure of energy which results from the proper employment of our faculties. Life involves incessant change, and even decay itself is a manifestation of energy of a certain kind. Waste is harmful only when it is excessive and not speedily followed by processes of repair, and to arrest normal change would be to check the expression of life, or even to cause death. What I do maintain is, that while health is incomparably the greatest blessing vouchsafed to man, here, in London, many of the conditions under which a constantly increasing number live, militate

against its attainment, and by so doing diminish the happiness and add to the sorrows of those who ought to be able to choose between good and evil. I alluded to "want of tone" as a striking peculiarity of many of our common ailments, and by means of a few illustrations I sought to demonstrate some of the causes which tended to produce this condition. The more important of these may be thus briefly summarised: excessive and persistent brain-work without sufficient rest; brain-work in persons incapable by nature, or by reason of imperfect training; the endeavour to carry on simultaneously several occupations; and lastly, over-anxiety and worry connected with daily life, striving after success, &c.

The discovery of the cause or causes is a necessary preliminary to the prevention of a given evil. If, on being discovered, such causes are removed, their effects will cease to be displayed. How, it may well be asked, are such causes as those I have just mentioned to be got rid of? Their existence is but too manifest; is their removal possible? I believe that with regard to some of them the question might be answered in the affirmative, and that in the case of others their effects might be considerably lessened by the adoption of a few precautionary measures.

It appears to me that the responsibility for their widespread existence must be shared by the State, by society in general, and by those individuals who are the principal sufferers. If this statement be correct, it is surely worth while to inquire what amount of amelioration each of the parties concerned may be asked to contribute. I shall be very brief in my remarks as to the State and society in general, inasmuch as little or nothing in the way of reform can be expected from either of these ; the important points for consideration are the measures which individuals might adopt so as to prevent or mitigate "wear and tear," and to combat their untoward results when once developed.

That the State is responsible for a large amount of unnecessary wear and tear cannot, I think, be denied ; I will refer to only one of the conditions of modern political life, viz., the management of business in the House of Commons. This, at the present day, is such, that diligent attendance during a single Session is sufficient to wear out the physical and mental powers of the strongest man. The late hours, the long sittings, the frivolous questionings, the weariness and emptiness of many of the debates, furnish an ample explanation of the want of tone

and ill-health of many of those who endeavour to do their duty. It cannot be said that these evils are necessary. With regard to the expenditure of time, is it not possible to devise some means whereby the daily work could be got through, say in six hours at the outside? Would less real work be done if the House of Commons were to meet at half-past four and never sit later than twelve, and if the business were adapted to the time, and not the time to the business? There can, I think, be but one answer to this question.

In regard to the responsibility of society for much of the wear and tear of the present day, and to any improvement which can be obtained at the hands of that all-powerful body, it will be difficult to offer any practical suggestions. In a criticism on my previous paper, the *Spectator* asserts that the endurance of the racket of society is altogether voluntary, and infers therefore that it could be dispensed with. No doubt it is voluntary in the simple meaning of the term; but the obligation to pay court to society is one which cannot be evaded with impunity by those who wish to rise. Disagreeable as the notion may be, it is nevertheless true that being seen in society is often as useful to the pro-

professional man as advertising is to the tradesman. "Out of sight, out of mind," holds good in both cases, and in that of the former an increased measure of success is followed by more imperious demands on the part of society. If advantages are to be retained, their possessor must show that he is able to bear the popular gaze, and the exhibition flatters those whose support will tend to bring further successes within reach. If society-haunting afforded the necessary relaxation to the over-worked brain, it might be excused on that ground; but unfortunately a heavy price is often paid by men who give to society the time which ought to be devoted to rest or relaxation. It is curious that on the other side of the Atlantic the claims of society are found to exercise an injurious influence on a very different class. We have lately been told that ill-health from over-work among American children is attributable not to school-pressure, but to parental ambition and to the "society engagements" of the pupils.

In a primitive state of society the more important of the laws of health are unconsciously obeyed; but this passive condition of obedience is not possible for the active workers in large cities. They are

surrounded by unfavourable circumstances, so common as to be little noticed, and often considered as practically unavoidable even by those who regard them as evils. In the case of individuals the problem which offers itself for solution is twofold, viz., how to lessen the causes which induce excessive wear and tear; and having done all that seems possible in this respect, how to preserve health under those unfavourable conditions which are, or appear to be, irremovable.

In estimating the amount and character of brain-work which can be performed without causing undue wear and tear, it is obvious that no rules of universal applicability can be laid down. Men's capacities for work differ as much as their features, and very much depends upon previous training, but a few practical suggestions may not be without value. In my former paper I mentioned two important tests, by the aid of which it could be determined in any given case whether hard mental toil was producing mischief or not: one of these is capacity for sleep, and the second, of subordinate though nearly equal value, the state of the appetite and digestion. If the sleep be normal in amount and refreshing in character, and if the appetite and

digestion remain good, it is certain that no harm is being done. With regard to the quantity of sleep, it is impossible to lay down any hard and fast rule, but six or seven hours are generally sufficient. There is probably some truth in the old maxim that an hour's sleep before midnight is equal in value to two hours afterwards, if only because its adoption encourages early hours. The great value of rest as a restorative agent is clearly shown by the fact that a capacity for long refreshing sleep is regarded by surgeons as considerably lessening the risks of an operation, especially one entailing much shock or prolonged repair. It is also a matter of common experience that persons who sleep soundly and drop off to sleep easily are capable of sustaining a larger amount of mental and corporal exertion than those who find it difficult to get to sleep, and who wake up several times during the night. Shakespeare recommends as safe counsellors men "such as sleep o' nights."

There is much difference of opinion concerning the desirability of an after-dinner nap. Those who advocate it cite the example of animals, but these gorge themselves with food whenever opportunity offers, and are heavy and drowsy in consequence. A

short rest is, however, different from lethargic sleep, and often appears to do good. Brain-work should certainly be forbidden after dinner; the interval between it and bedtime should be devoted to recreation and amusement. In the case of elderly people a short nap after a late dinner often aids digestion; but as a general rule it is better for such persons to make their principal meal at 2 P.M. The digestive powers of most elderly people are at a low ebb in the evening. When sleeplessness is troublesome, relief should be sought for in the discovery and removal of the cause, whenever possible. The condition is often due to indigestion, and when this is the case, the ordinary remedies for inducing sleep are worse than useless. The nervous relations between the brain and the stomach are so intimate, that disorder of the one organ is almost certain to affect the other. Excitement, worry, and anxiety, which have their seat in the brain, interfere with the functions of the stomach, and in like manner anything that unduly taxes the power of, or irritates the stomach, disorders the circulation and nutrition of the brain. The sleeplessness often complained of by gouty persons is due to the poisonous effect of the morbid material upon the nervous system. Ex-

cessive smoking, too much alcohol, tea, and coffee, often resorted to by over-worked persons, are frequent causes of sleeplessness. In all these cases the cause is removable, while the effect may be counteracted by appropriate treatment. Nothing is more mischievous, however, than to continue the habits, and to have recourse to drugs to combat the effects. A due amount of exercise tends to induce normal sleep, and such exercise need not be of a violent character. A walk of two or three miles daily is sufficient, and is perhaps as much as a busy man can find time for. A ride on horseback, the Palmerstonian cure for gout, is probably the best form of exercise for those whose minds are constantly at work. It has been well said that a man must come out of himself when in the saddle; he is forced to attend to his horse and to notice the objects he meets. Walking may be a merely automatic process, and afford little, if any, relief to the mind, and carriage exercise may be practically valueless, if the mind is not diverted from what had previously occupied it.

Most people allow that early rising is advantageous, but there are, it is to be feared, comparatively few brain-workers who adopt the habit. They allege,

and with some reason, that they can work best at night, because the surroundings are quiet and there is freedom from disturbance. When they state, however, that they themselves feel better fitted for work, they are, as a general rule, misinterpreting their own sensations. They feel quiet because they are tired; one part seems fit for work because the other is too weary to protest. A recourse to tea, coffee, or alcohol helps the mind for a time, but the effect of these *stimuli* upon the wearied organism is only to increase the penalty that must sooner or later be paid, in the form of sleeplessness and other evidences of nervous disturbance. Morning is the time for work; after a due amount of sleep the mind is more fitted to grapple with difficulties than after a long and fatiguing day. To those unaccustomed to the habit, a strong effort is necessary in order to begin the practice of early rising, and in winter the difficulties would doubtless seem great. Thanks, however, to modern contrivances, a small room can soon be made comfortably warm, and a cup of coffee can be prepared with a minimum of trouble. A man who has done two hours' good work before breakfast feels that he is, to that extent at least, in advance of the majority of his fellow-

workers. Dean Hook, we are told by his biographer, considered his morning very short if he did not get to work before half-past five o'clock.

The state of the digestion has been alluded to as a test of the effect which severe mental work is producing on the system. A man who works hard with his brain must eat a sufficient quantity of food to supply the waste of the nervous tissues. Indigestion with its host of troubles is to be kept at bay, and it is often difficult to accomplish this object. Given, however, a fair constitution, much may be done by ordinary care and forethought. A good appetite for breakfast is an excellent test of the state of the digestion, and of the good effects of the night's rest. Captain Dalgetty's plan of securing, on all occasions which offer, "as much vivres as the magazine can possibly hold," is not one to be recommended for ordinary persons engaged in peaceable occupations, but there can be no doubt as to the advantage of taking in a reasonable supply before beginning the more arduous labours of the day. The lateness of the dinner hour at the present day necessitates, for most people, a tolerably substantial meal between one and two o'clock, and if a man is kept hard at work during the afternoon it is highly desirable

that he should take at least half an hour's rest before dinner. Nothing is more likely to produce indigestion than to eat even moderately when mind and body are thoroughly wearied with the day's toil.

Judging from the enormous number of remedies for indigestion which are being offered to the public, and from the lavish manner in which they are advertised, it would appear that the disorder must be a very common one, and that the remedies supply a want which is urgently felt. In no other country in Europe is there the same profusion of nostrums, and the reason for this difference is perhaps not far to seek. In former days men's stomachs were often overtaxed by too much food; at present excessive eating is out of fashion, but the digestive organs of many persons are unequal to the task which they are called upon to fulfil. Brain-workers are notoriously prone to suffer from indigestion, some of the causes of which have been already indicated. The fact is that the process of digestion, even of proper food, makes a considerable, though unfelt demand upon the nervous energy of the system. If too much of this energy has been expended in other ways, or is diverted, when most required, into other channels, digestion will be more or less imperfect. Take the

case of a man who, after a hard day's work, sits down to dinner at eight or half-past, having taken a hasty and scanty lunch some hours previously. His sensations tell him that he is terribly in want of food, but they do not warn him that he has little or no power of digestion left. He eats freely and rapidly, and one form of discomfort is soon exchanged for another. Digestion goes on very slowly, and the process is far from complete when bedtime comes. The sufferer is weary, but sleep is unrefreshing, and probably broken by dreams or nightmare. He begins the succeeding day weighted with the burdens of its predecessor. Now all these evils—and they are no slight ones to the man obliged to work hard with his brains—might be prevented by a little forethought. The dinner hour at the present day is far too late; it would seem that we dine when we are literally unable to do anything else. Seven o'clock is quite late enough, and if that be the fixed hour, a certain time ought to be set apart for luncheon. Then, again, a man who feels exhausted for want of food should eat sparingly, and above all things slowly. The suggestion I have already made, of half an hour's rest before dinner, would, if adopted, avert many of the troubles which are caused by

taking food when the stock of nervous energy necessary for digestion has been well-nigh exhausted.

With regard to the quality and kind of food best suited to men who are working hard with their brains, space will not allow me to offer more than a few suggestions. A man must be very unobservant or very foolish if he does not find out for himself what suits him and what does not, but few men realise the extent to which our sensations are influenced by the condition of our digestive organs, and what an effect indigestion often produces upon our views of things in general, and our own prospects in particular. Under any circumstances, if indigestion is to be avoided, a positive sense of satiety should never be experienced after any meal, for this is beyond the point of healthful indulgence, and really signifies that too much has been taken. That which ought to be attained occurs immediately previous to this, and is characterized by ease and quiescence. Much improvement has been effected of late in our methods of preparing food, but a great deal remains to be done in this direction. The increased use of vegetables and of fish as an article of diet is a salutary change, combined as it often is with a diminished consumption of meat. The move-

ment in favour of great moderation in the use of wine and other alcoholic liquors is also bearing good fruit, though no objection can be raised against the lighter wines, especially if diluted with hot water or some one or other of the aërated waters. The taking of a large amount of fluid with meals, however, should be avoided; it is apt to become a habit, and is liable to cause and aggravate indigestion. Iced water is not suitable as a drink at meal-times. Its habitual use is one of the causes of indigestion, which appears to be endemic in all American cities. With many brain-workers a little alcohol taken with food decidedly aids digestion, but its use must always be followed by rest and not by renewed efforts. The brain is still weary, but the alcohol prevents the weariness from being felt. It is always mischievous to take alcohol between meals in order to stimulate the flagging powers.

Fresh air, recreation of all kinds, and change of scene are the next most important agents for preventing wear and tear, and for removing their effects. I shall only add a few words on these subjects. Under the first I would include ventilation, for though most of us appreciate fresh air out of doors, there is far too little attention paid to the

renewal of the air in our dwelling-houses, and not a little discomfort results from this neglect. Windows cannot be always kept open, and the problem of ventilation without draught is no doubt difficult of solution. Tobin's contrivances for the admission of fresh air are about the best that have been devised, and the simpler form, that of openings in the window sashes, through which the air is projected upwards and then descends, can be adopted in any room. There should of course be outlets for foul air, and the products of combustion, wherever gas is used. A great reformation is needed in this respect; in crowded rooms the evil is often very perceptible.

I can only just glance at the subject of recreation, though it is a very important means of repair. The term includes a great variety of measures, and even of employments. Change of work is one form of recreation, because, it may be presumed, the new employment occupies a different portion of the brain, and the one that has worked obtains rest. Monotony of occupation is always irksome, no doubt because certain portions of the brain are exclusively occupied. A hard-worked man should think no form of recreation beneath his notice; he is fortunate if he has a really satisfactory hobby or two. Talleyrand's

prognostication of the kind of old age that awaited the man who did not know whist is full of truth, if it be applied to amusements and hobbies in general. Perhaps its author would scarcely have recommended whist for an old man had he been able to foresee the bewildering modifications which have been made in the way of playing the game. In this, as in other things, the tendency is to turn play into work. Let us hope, however, that some of our simpler forms of recreation may be permitted to survive at least for our time. Books remain, and we may be thankful for the stock we already possess. Reading offers the most available means of recreation. Dean Hook's practice in this respect also is worthy of adoption. He tells us himself that he always had a novel in hand. It lasted him a long time, "but when a man has much to do, a little time thus spent does the mind good." Books, however, should be suited to the occasion. As Bulwer tells us, "when taken indiscriminately, they are no cure for the diseases and afflictions of the mind. There is a world of science necessary in the taking them. I have known some people in great sorrow fly to a novel or the last light book in fashion. One might as well take a rose-draught for the

plague. Light reading does not do when the heart is really heavy." By all means let the recreation be conformable to the tastes of the individual, and adapted to his condition. When a man over sixty, who has led a sedentary life, suddenly and vehemently takes to tricycling, he may feel pretty sure that he has failed to catch the meaning of the term "recreation," and that a very different process will certainly develop itself.

The last point for consideration is that which refers to change of scene and holidays. No doubt much of the value of health-resorts is due to the change of scene which is connected with them, though other factors co-operate in the production of the good effects. A hard-worked man, compelled to live in London for many months in the year, confidently expects to receive the greatest benefit from a sojourn at the seaside, or among woods and green fields, and some men while working in London have endeavoured to get as much fresh air as possible by spending their nights at least in the country. Such a plan, unfortunately, seldom, if ever, succeeds; most men who try it soon become aware of its drawbacks. To get really fresh country air, uncontaminated by the smoke of London, one must go at least

a dozen miles from the metropolis, and to do this daily necessitates a double railway journey, besides the drives to and from the stations. The man whose business in London begins at ten, and is over by four or five o'clock, may live twenty miles from his office, but the professional man, with longer and less definite hours of work, does better by keeping close to his post. He ought, however, to avail himself of every opportunity of getting a short change in the country, or at the seaside, at some one or other of the many suitable places within easy reach, such as Brighton, Margate, Eastbourne, and the rest. It must be admitted that there is some difficulty in finding comfortable quarters for such short holidays as from Saturday to Monday. Lodging-house keepers do not lay themselves out for visitors of this kind, and hotels are for the most part uncomfortable places, especially on the days mentioned. Those who could afford it would do well to rent a small cottage in the country, which would serve as a retreat whenever a holiday could be obtained. In the number of health-resorts within easy reach, the hard-worked Londoner is exceptionally fortunate as compared with the dwellers in most continental capitals. An occasional change and rest, if only for thirty-six

hours, in pure air, would help many a man to get through months of hard work with ease and satisfaction. Even from a money point of view, to be always "up to the mark" would to many men be equivalent to a considerable addition to their income.

The subject of an annual holiday is the last to which I shall refer; there can be no doubt as to the advantages of this means of rest and recreation. Where to spend a holiday and how best to enjoy it, are topics which should frequently engage the thoughts of a man who is working at high pressure. The idea of a holiday, even if the realisation be somewhat distant, lessens present discomforts, and the carrying out of a well-devised plan enhances the enjoyment when the time arrives. The number of ways in which a holiday may be profitably spent is almost infinite. Yachting, boating, fishing, &c., will suit those who require bodily rest; while walking, riding, and other forms of active exercise will suggest themselves to a different class. A drive through several English counties, with leisurely visits to all places of interest, might serve as a very pleasant occupation for five or six weeks. Something definite should be aimed at and done during each holiday;

an active-minded man must have occupation of some kind even in his hours of recreation. A change of work is indeed a form of rest, and happily there is no lack of subjects for every variety of mind. While enjoying the fresh air of the seaside the professional man can prosecute some branch of natural science for which he has a liking, or can indulge in a course of his favourite authors; when travelling abroad, the language of the country, its history, and works of art will afford an ample field both for recreation and pleasant employment. By such means as these, mind and body are alike renewed and invigorated.

I have thus described the principal measures which we ought to take if we wish to reduce to a minimum the wear and tear of London life. They may be briefly described as "rest and repair," and their adoption to a greater or less extent is within the power of most men. I am far from advocating any undue anxiety or unnecessary care with regard to health, but seeing as I do many instances of men breaking down under hard work, and in some cases never regaining their previous condition, I have been led to offer these few remarks by way of advice and warning. If over-work and worry cannot be lessened, common sense tells us that we should en-

deavour to mitigate their effects in every possible way, and the best method of compassing this object is to preserve the mind and body in such a condition as will enable them to perform satisfactorily every function which can reasonably be required of them. If this result cannot be attained, the question of reducing the amount of work will demand a prompt solution. The acquirement of fame and fortune is but a sorry exchange for health and vigour. *Non est vivere, sed valere vita.*

HEALTH-RESORTS AND THEIR USES.

THE idea that a remedy exists for every disease to which human beings are subject is one which must always be fascinating. We naturally regard diseases as so many enemies, and would fain persuade ourselves that Providence has placed within our reach certain agencies by which they may be subdued. At the same time one is forced to confess that everyday experience does not encourage these sanguine views. We look around us and see cases of chronic disease, little if at all benefited by the treatment of the most scientific character, carried out in the best possible manner. Still with some the idea survives that a remedy might be found if only we knew where to look for it. This notion was doubtless largely fostered by the implicit faith in drugs which prevailed not many decades ago, and is yet far from extinct. Such subjects as fresh pure air, diet, clothing, exer-

cise, &c., now justly considered as of great moment, were for the most part either totally neglected or passed over as quite subordinate in value. The science of hygiene—that is, of the art of preserving health—has advanced with rapid strides since the beginning of this century, and more particularly during the last thirty years. While the treatment of disease by drugs has lost much of its popularity, an ever-increasing reliance is placed on hygienic measures and dietetic regulations. The first rank among the former must be accorded to what is termed “change of air,” and to the various beneficial influences connected with that large class of localities known as “health-resorts.” Such indeed is the estimate in the public mind of the value of health-resorts, and so boundless the promises made on behalf of so many of these places, that it would seem as though the idea not of one, but of a score of unfailing remedies for every disease had been triumphantly realised. I propose to discuss, firstly, the principal uses of health-resorts and the expectations which may be formed in regard to them ; and secondly, to compare foreign health-resorts with those which are to be found in the British Islands.

The belief has prevailed from very early times

that health could be restored by a sojourn in certain localities. It is probable that, as at the present day, a change of temperature constituted in most cases the principal attraction. The dwellers in a hot, enervating climate would find that improved health and vigour attended even a short visit to a region possessing climatic conditions of an opposite character ; and on the other hand, sufferers from various disorders, *e.g.* of the rheumatic class, found relief in the heat from which the former had been glad to escape. But besides differences of temperature, several circumstances, peculiar to a locality, exercise a special influence upon health. The pureness and freshness of the air, the existence of springs, the nature of the vegetation and of the soil, and the proximity to the sea, would be the chief points. A place marked out from the surrounding neighbourhood by the possession of any of these advantages, would in the course of time be regarded as a sanatorium, at all events for certain classes of diseases. The benefits which so often result from change of air, popularly so-called, are matters of daily experience, and are never more clearly exhibited than in cases of convalescence from acute and severe disorders. Unmistakable signs of improvement seldom

fail to make their appearance, in a very short time, when convalescents—for instance, from fevers—are removed from the scenes of their illnesses into country air or to the seaside, which may be cited as instances in point. Various chronic conditions of ill-health are scarcely, if at all, relieved by medicine alone, whereas a change of air frequently brings about an improvement. In a large number of cases the physical qualities of the atmosphere of certain districts and localities have a peculiarly beneficial and curative action, but different conditions are required by different persons. Just as the jaded dwellers in crowded cities are benefited by country air, so, as has been said, it is found that a temporary change of an opposite character, and apparently for the worse as regards hygienic surroundings, often produces similar results. When the mind is active and the disposition social, the tranquillity of a country life sometimes acts prejudicially upon the nervous system, and causes deterioration of health and strength. Under such circumstances restoration is best effected by removal to a town, where the mental faculties can find appropriate opportunities for exercise. The benefit in these cases is due really to the change of environment, and not to the hygienic

qualities of the place. The same with regard to food. Persons to whom delicate and highly nutritious viands appear from long use to be absolutely necessary, frequently discover that coarser fare can be taken with relish, and that the digestion is thereby improved.

That the benefits often result from the change, and not necessarily from the place, is proved by the fact that a permanent residence in the locality does not perpetuate the advantage derived during the earlier period of the sojourn. It is clear, therefore, that change of air includes many aids to health besides the physical properties of the atmosphere. In cases of convalescence from acute disease, it is true that much of the benefit derivable from change of air is due to minute differences in the physical constitution of the atmosphere. Modern chemical researches have shown that the air of cities and towns and the air of country places differ as regards the proportions of oxygen and carbonic acid. But generally, new scenes, agreeable society, recreation, rest, or at least freedom from toil and ordinary avocations, assist very considerably in the restoration of shattered nerves and broken health.

To estimate the popular opinion of the value of

change of air, it is only necessary to cast a glance at the number of books written for the purpose of instructing the sick and their advisers in the choice of a locality, or of proclaiming the special advantages of particular places as regards climate, mineral springs, or other features. No department of hygiene has been so copiously treated as this. Caution is, however, necessary in accepting statements with reference to localities in which the authors practise. Great kindness is usually displayed towards the virtues of the place so confidently recommended, while its faults are conveniently kept in the background, or not allowed to exist. One of the handiest and most trustworthy works is Dr. Macpherson's *Baths and Wells of Europe*. With this work and *Our Byths and Wells*, by the same author, it is not difficult to form a practical judgment as to the real character of any given health-resort. Having come to the conclusion that a change of air is desirable or necessary, the important question to decide is, What locality offers the best chances of recovery or of prolongation of life? Various circumstances require consideration; the chief of these are, the ailment of the patient, his own desires, his pecuniary means, and his ability or otherwise to stand the fatigue of a

journey. In some cases mere change of abode is sufficient, in others a change from one part of England to another, as to the seaside, appears to fulfil all requirements, while, in a third class, certain advantages are connected with foreign travel and residence. In addition to the good results arising from change of air, there are those which are obtainable from drinking or bathing in the waters of certain localities, such waters either possessing a high temperature or containing an unusual proportion of certain saline matters in a state of solution, or exhibiting both these peculiarities.

It is not easy to give in a few words a proper definition of climate. The most obvious circumstances which affect the climate of a region or country are temperature, humidity, purity of the atmosphere, wind, atmospheric pressure, intensity of light, atmospheric equilibrium or otherwise, soil, amount of vegetation, and nearness to the sea. Many conditions, however, operate on the human system besides those which come under the cognisance of the meteorologist. Pure air, abundance of sunshine without excessive heat, so that several hours can be spent in the open air; an equable temperature and absence of, or shelter from, high

winds whether hot or cold, are the main *desiderata* for all classes of patients. For our present purpose, the most convenient division of climate is into that of (1) the seashore; (2) the mountains, (3) inland wooded districts, and (4) the open sea. The climate of the seashore presents several marked peculiarities. Owing to the continuous evaporation going on from the sea, the temperature during the summer months is lower than that of the neighbouring inland districts; it is also much more equable, because the seawater maintains its temperature for some time, in spite of changes of wind and other disturbing causes. The air from the sea also contains abundant moisture and particles of saline matter in suspension; it is more dense, and therefore a given volume contains more oxygen than ordinary air. Sea-air also contains much ozone and a minute quantity of iodine. The effects of sea-air are well known. It improves the digestive powers and promotes changes of the bodily tissues. It strengthens the nervous system, and hence it materially assists in the recovery from various forms of illness. These effects are for the most part rapidly produced.

Sea-air is useful in almost all cases of chronic disease, and especially in those of tedious convales-

cence. When, however, the digestive and assimilative functions are very weak, the result is often not satisfactory, inasmuch as waste of the body is promoted, while a corresponding amount of new material fails to be assimilated. Under such circumstances a preliminary sojourn for a short period in pure country air is advisable. No country in the world can vie with England in the number and variety of its seaside places, many of them excellently situated, and offering every advantage in the way of fresh air, facilities for bathing, &c. These advantages are, however, much neglected, and sometimes turned into positive sources of mischief. Bathing in the open air is potent either for good or evil according to circumstances, yet it too often happens that baths are taken even by delicate persons without proper advice. As Dr. Weber points out, warm sea-baths are generally indulged in more on the prompting of the inclination than under competent advice. He adds that, "infinite advantages might be derived from them, either alone or combined with the internal use of waters. Many invalids would gain more from such a plan properly carried out than from a visit to a continental spa." It certainly seems strange that whereas advice is always sought before taking

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baths at continental bathing-places, where perhaps the water contains only a small proportion of saline matter and differs but little from that of an ordinary warm bath, courses of warm sea-water baths in England are often taken by invalids of all kinds without any advice, and with blind confidence in the suitableness of the water to all conditions. Sea-air is especially beneficial in scrofula, in bronchitis, in many cases of rheumatism, in gout, and in most cases of consumption. The increased temperature plays an important part in the alleviation of many of these diseases. The list of English summer health-resorts by the seaside is a very long one. Those on the eastern coast, from Tynemouth to Dover, have a comparatively dry and bracing climate. On the south-east, as far as the Isle of Wight, there are a host of well-known places with climates differing according to their situation, aspect, exposure to certain winds, &c. Further westward are Bournemouth, so justly renowned as a winter-residence, Torquay, Penzance, &c. On the west coast are the Welsh watering-places, and those of Lancashire, Westmoreland, and Cumberland. Many very desirable spots are to be found on the coasts of Scotland—North Berwick, Portobello, Dunoon, Nairn, Rothe-

say, and Ardrossan being those that are best known. Ireland is almost equally well provided with similar places. The Channel Islands have many qualities to recommend them, especially during the winter season. Their temperature is considerably higher and more equable than that of most portions of our southern coasts.

The diseases for which seaside stations are generally resorted to are pulmonary complaints, including consumption, bronchitis, and asthma. England is not deficient in localities eminently suitable for persons suffering from these affections. These localities are all characterised by mildness and equability of temperature, and purity and comparative calmness of the atmosphere. The advantages they offer to patients suffering from pulmonary diseases are second to few, and they have the marked recommendation of being easily accessible, near home, and within reach of friends. Of course as regards temperature they cannot compete with the Riviera, but temperature is not everything, even in the treatment of a consumptive patient. Indeed, from recent experience, it would seem that hot climates are not necessarily good for consumption, and that cold and frost are by no means always bad, but sometimes salutary for chest diseases.

Moreover, we are assured by Dr. Bennet that the descriptions of the winter climate of Nice, Cannes, and Hyeres, and of Italy in general, as contained in most books of travel, works on climate, and guide-books, are mere poetical delusions. "The perpetual spring, the eternal summer, the warm south, the balmy atmosphere, described in such glowing terms, exist only in the imagination of the writers."

Some of our English health-resorts have other recommendations beyond their temperature as curative agencies for chest diseases. Bournemouth, for example, combines several favourable conditions, met with elsewhere only at Arcachon. The natural purity of the air is secured at Bournemouth by the general adoption of stipulations for a large space round every house. The atmosphere of the place is positively disinfected by the "oxidising and antiseptic influences of the peroxide of iron and camphoraceous matters, due to the chemical effects of moisture and sunshine upon the terebinthinate emanations from the pine-trees." Dr. Dobell has given figures showing that upwards of three million pine-trees remain in the different districts of Bournemouth and its immediate surroundings. These trees give off an immense quantity of camphoraceous material, the anti-

septic powers of which can be conceived, if we reflect that a comparatively weak solution "is sufficiently strong to preserve animal matter almost indefinitely free from decomposition." The atmosphere is soothing to the respiratory organs, is mild and fairly equable, and not relaxing by over moisture. The night-temperature during winter is never very low; fogs are unknown; and, according to Dr. Dobell, the hotels, boarding-houses, and lodging-houses are, almost without exception, excellently built and well-arranged for invalids. When such advantages as these can be obtained near home, it is surely a mistake to send patients several hundred miles for the sake of a somewhat higher temperature. No doubt, to bask in the sunshine of the Riviera for several hours a day is most enjoyable and exhilarating; but at sunset the temperature rapidly falls, and a frosty night often succeeds a day on which the majority of invalids required sunshades to protect them from the heat. Unless proper care be taken, such variations of temperature are apt to lead to very untoward accidents.

Space will not permit me to dwell at greater length upon this topic, and I now pass on to consider another class of climates available as health-resorts,

namely, that of mountains. The term "mountain-climate" is generally applicable in Europe to heights of from 1,500 to 6,000 feet. The effect of mountain-air resembles in some respects that of sea-air. The differences are for the most part due to lower density and temperature, and to the more frequent variations in the latter respect. The air also contains less moisture, and the temperature often falls considerably at night. The effect of mountain-air is to improve the digestion and nutrition, and to strengthen the nervous system. The improvement in these respects is brought about less rapidly than at the seaside. Owing to the rarefaction of the air with the increase of elevation, more frequent and deeper inspirations are required, and more or less excitement of the organs of circulation necessarily ensues. Mountain-climates are suitable for many cases of convalescence from acute diseases, and for conditions of ill-health in which want of tone is the prevailing characteristic. Where there is great muscular debility, or any organic disease of the heart, such climates are decidedly unsuitable. Of late years several mountainous localities have obtained a considerable reputation for the treatment of cases of consumption, and of these Davos Platz is

perhaps the most celebrated. This place is 4,800 feet above the sea-level, and six or seven hours by *diligence* from Landquart Station, on the road from Zurich to Coire. Its efficacy for the cure of consumption in the case of natives of the lowland stations has long been known. Evidence of the value of mountain-air in consumption has also been derived from the experience of medical practitioners in the large towns at the base of the Peruvian Andes. Consumption appears to be a very common disease in these places, and the removal of the patients to stations at elevations of several thousand feet is attended by the happiest results. The winter climate at Davos is preferable to that of the summer, as there is far less wind, and the climate is more equable and dry. Snow begins to fall in November, and continues through December, generally attaining a depth of three or four feet. "The atmosphere," says Dr. Burney Yeo, "becomes still and calm, the air intensely cold and dry, and absolutely clear. The temperature at night often falls very low, frequently some degrees below zero. The days are cloudless, with an intensely blue sky, and an amount of heat from solar radiation which enables invalids to pass hours sitting in the open air; and

the brilliancy of the sunshine in mid-winter makes umbrellas and sunshades essential for protection."

It must appear strange, and to some extent inexplicable, that consumption should be cured, or at all events its symptoms brought to a standstill, and the general health vastly improved, by such different climates as those of Davos, Torquay, Bournemouth, Mentone, Madeira, and other places. There are, however, several circumstances which serve as a tolerably adequate explanation, though it must be confessed that our predictions of the benefits likely to be derived in a given case from any particular locality are often falsified by the results. But the localities just mentioned have several features in common. The air is pure and free from admixture of organic particles. There is at these places an unusual amount of sunshine, so that patients can often spend several hours of each day in the open air, whereby the lungs are improved, the appetite and powers of digestion are increased, and the nervous system is strengthened. As to the special curative agencies at work in mountainous health-resorts, in addition to the dryness, purity, and stillness of the air, the freedom from organic particles, which we now know are active promoters of putrefaction, is in all proba-

bility the condition most potent for good in chest cases. There is also the rarefaction of the air, which causes more frequent and deeper inspirations, and thus improves the condition of the breathing apparatus. The healthy portions of the lung are called upon to display increased activity, and their action compensates for the loss of those portions invaded by disease. Besides these advantages, patients take more care of themselves in these elevated health-resorts than at others where the conditions more resemble those of ordinary life; the place and its peculiarities constitute a very important part of the treatment, and the regulations with regard to exposure, &c., are certain to be carefully attended to. It is only necessary to add that consumption is a disease of which there are several varieties, each having certain stages, and that the choice of the most suitable locality can be arrived at only after a thorough consideration of all the circumstances of the case.

A few words will suffice for the description of the climates of inland wooded districts and of the benefits to be derived therefrom. All large cities and towns are surrounded by more or less salubrious country places, a sojourn in which often serves to

restore or improve the health. The pureness of the atmosphere and the comparative absence of organic particles are the principal favourable agencies at work. The air too is somewhat warmer and more equable; the humidity in wooded districts is higher. Such conditions are especially suited for convalescents from acute diseases, and for the improvement of chronic ailments. A change into country air, as has been hinted, may often be advantageously adopted as a preliminary to a lengthened sojourn by the sea-side or a journey to a mountainous health-resort. But country air has a value of its own. Dr. Beale says, "If patients could be induced to retire to a pleasant part of the country, where they would take moderate exercise, and be free from mental anxiety, meet with agreeable society, live regularly, take small doses of alkalies, and bathe themselves for an hour or two a day in warm water, in which some carbonate of soda has been dissolved, they would receive as great a benefit as by travelling hundreds of miles away, and at much less trouble and expense." All this is no doubt true, but, as a general rule, persons like to find things ready to their hand, and put less trust in arrangements which could be made almost anywhere than in those which are the

special characteristics of certain places. There are many localities to be found in England, Wales, and Scotland specially adapted for all the purposes of summer health-resorts; but generally there are no proper hotels or establishments for the reception of numerous visitors; and such establishments are mostly discouraged by the landed proprietors, who occupy the most eligible localities. "Such," Dr. Weber points out, "is the case with the moors of Scotland and Yorkshire, with their wonderfully enlivening air. A small inn, a few cottages and scattered houses, rarely disengaged, are all that is to be had; and the social element is wanting, even if one be fortunate enough to obtain accommodation." Many localities close to London would afford most excellent summer health-resorts; in Surrey, for instance, the hills near Leith Hill, and the Ewhurst Windmill and Ranmore Common, near Dorking, or the Hindhead or the Blackdown, near Haslemere; while further away there are the South Downs, Dartmoor, and Cannock Chase. Little or no accommodation is, however, to be met with at any of these places.

The last form of climate to which allusion has been made is that of the open sea. Long sea-voyages are of great value in many cases of consump-

tion. The patients have the advantages of the constant influences of the sea-air, combined with mental repose and passive exercise. There are, of course, several drawbacks, the most prominent being the liability to sea-sickness and to bad weather and the confinement which necessarily occurs ; the monotony in occupations, the want of variety of food and of articles sometimes longed for by invalids, and the discomforts arising from the machinery, in the case of steam-vessels. If the patient be not liable to suffer from sea-sickness, and if his appetite and digestion be fair, he has a much better chance of being benefited by a sea-voyage than under opposite conditions. Various conditions of debility, especially those arising from excessive mental strain, are almost certain to be improved by a sea-voyage.

An important class of health-resorts includes those which have obtained their renown by reason of the possession of springs of water, valuable either on account of their temperature, or because they contain an unusual amount of certain gaseous or saline matters in a state of solution. An enormous number of springs are now in vogue, and if we could believe a tithe of the statements confidently put forth as to their efficacy, chronic disease would be the fate only

of those who either could not or would not visit the health-giving springs. Making allowances for an enormous amount of exaggeration, let us see what can be claimed for baths and waters. There is, however, a difficulty at the outset, inasmuch as it is impossible to separate the influence of such agencies as travelling, change of air, diet, and social conditions, from that which may be due to the external and internal use of any given water.

It is not easy to classify mineral waters, but for practical purposes they may be divided into seven groups. The first includes the *thermal* waters, which are characterised by considerable elevation of temperature and poorness in saline constituents; heat and purity are, in fact, their main peculiarities. By way of comparison, it may be desirable to mention that water artificially heated to from 85° to 92° constitutes a *tepid* bath; a *warm* bath has a temperature of from 92° to 98° ; and a *hot* bath of from 98° to 160° . The best known thermal springs are those of Bath, Teplitz, Gastein, Leuk, and Wildbad; the highest temperature of any of them being about 120° . When these slightly mineralised thermal waters are taken internally, the effect is neither more nor less than that of an equal quantity of ordinary

water heated to the same temperature: tissue-change is promoted, and the action of those organs which remove waste products from the blood is increased. Hot water taken slowly is rapidly absorbed, and is useful for the purposes just mentioned. It is, however, in the form of baths that the simple thermal waters are mostly used, the effects depending on the temperature of the water and the time spent in the bath. The beneficial results of a course of warm baths are well known; the skin is softened and purified, more blood circulates in it, and its functions are promoted; the nervous system is soothed, and certain forms of swelling and exudation are lessened or removed. All these good effects are often witnessed in cases of rheumatism, gout, neuralgia, and likewise after injuries, especially of joints. It must be kept in mind that the warmth and the moisture are the curative agencies. In this class of waters there is no claim that any saline matters are absorbed by the skin; indeed the quantity dissolved is too small to produce any effect, even were we to admit the possibility of absorption.

In connection with baths of all kinds, the capacity of the skin to absorb saline or other substances dissolved in the water is a point of considerable import-

ance. All the tissues of the body are more or less, porous, and therefore capable of soaking up water and various other fluids brought into contact with them. There is, it would appear, slight increase of weight after a *protracted* warm bath, and this is due to the imbibition of a certain quantity of water. As a matter of fact, however, the absorptive power of the skin is not great, and for this reason the integument constitutes a very effective barrier to the admission of materials into the blood. So long as the epidermis is intact, the hands can be dipped into solutions of poisonous substances without any risks of those evil results which would certainly follow the introduction of a similar fluid into the stomach. If it be true that only water is absorbed by the skin, the utility of bathing in iron waters or in alkaline waters, with the view of obtaining any *special benefit* from the *substances held in solution*, is clearly very questionable. Many experiments have been made for the purpose of determining this question. Highly soluble substances, such as iodide of potassium, have been added to baths of warm water and, after *prolonged immersion*, no trace of the iodine could be detected in the saliva. When, on the other hand, a few grains of this drug are dissolved in

water and swallowed, the iodine can soon be discovered in the saliva by a simple test. It is true that certain medicines readily pass into the system when rubbed into the skin, but this method of application is different from simply keeping the skin in contact with substances dissolved in water. Curious properties have been assigned to thermal springs, owing, as has been thought, to some peculiarity of the heat. There is, however, no foundation for this view; water artificially heated to a given temperature is just as efficacious as that derived from springs destitute of any special character. This fact is sometimes disputed by those whose interest it is to advocate the claims of certain springs, but those who know most about such matters have little doubt as to its truth. Some years ago the local authorities at Wildbad (one of the best-known baths of this kind) were proposing to enlarge the bathing accommodation. One member of the Board objected to the proposal, alleging that any one could have a Wildbad bath in his back kitchen. We have in England one of the finest thermal springs to be found in Europe. For all cases for which hot baths are suggested, the waters of Bath are not to be surpassed. They are now perhaps regaining their reputation, having been

undeservedly eclipsed by such places as Teplitz, Gastein, and Wildbad.

The next important group of mineral waters includes those which contain iron. These are used both for drinking and bathing purposes, but, as already mentioned, when taken as baths, they have no special virtues, inasmuch as the iron is not absorbed by the skin. For internal administration, however, they constitute most valuable remedies for all cases in which iron is indicated. In England we have but few springs of this character which are made any use of; that of Tunbridge Wells is probably the best known. It is used only for drinking purposes. One spring at Harrogate contains iron. A few springs in various parts of England contain so much iron as to be unfit for internal use. On the Continent, the iron waters of Spa, Pyrmont, Schwalbach, and St. Moritz are those most resorted to. Many of these contain a large amount of free carbonic acid, and are on that account pleasant to take.

Sulphur waters form a third and distinct group, and we have in England, at Harrogate, one of the strongest of this class. In addition to sulphur, the waters of Harrogate contain a large amount of salts, the action of which cannot be

separated from that of the sulphur. On the Continent the springs at Aix-la-Chapelle and Aix-les-Bains are those that have the highest reputation. The sulphur waters are supposed to be useful in rheumatism, gout, neuralgia, liver disorders, various affections of the skin, and in sundry other diseases. Very divergent opinions are held as to their real value in any of these ailments. When taken as baths, their effects are probably identical with those of common water of an equal temperature, and the same, in my opinion, may be said with regard to their internal use. It is especially worthy of notice that those local physicians who are so enthusiastic over the virtues of these waters almost invariably order powerful medicines to be taken during the course of bathing and drinking. This custom is universal in their treatment of one class of patients who are sent in great numbers to Aix-la-Chapelle. Experience teaches us that the same medicines are wonderfully efficacious at home, without the addition of malodorous waters.

A fourth class of waters consists of those which contain common salt as their principal constituent, and we have in England excellent representatives of this class. At Droitwich, Nantwich, and Middle-

wich, springs of brine are abundantly found, and the preparation of salt, by evaporating the liquor, forms the staple industry of these places. Brine from Droitwich has now been conveyed to Malvern, where patients have the advantages of using the strongest possible saline baths in a health-resort celebrated for its dry air, perfectly pure water, and exquisite scenery. The arrangements at Malvern are excellent, and well adapted for invalids. The water is too highly saline for internal use, but in the form of baths the salt acts as a powerful stimulant to the skin, and promotes its nutrition. By its action on the cutaneous nerves, it gives tone to the system. Springs of water containing much common salt are also to be found at Cheltenham and Leamington, at Kreuznach, Rehme, and many other places on the Continent. Alkaline waters, which owe their properties to the presence of carbonate of soda, are not to be found in England. The most celebrated are those of Vichy, Neuenahr, and Mont Doré, which are hot, and those of Bilin, Apollinaris, Vals, and Taunus, which are cold. This class of waters enjoys a considerable reputation in the treatment of indigestion and of those conditions in which an undue amount of acid is present in the system, *e.g.* in

rheumatism and gout. They are used both for bathing and drinking, though as stated in a previous paragraph, no appreciable amount of the saline matters is absorbed by the skin. Their internal use promotes tissue-change, and if continued for some time produces emaciation. It must be admitted that under their use, the symptoms of chronic gout and rheumatism are often much relieved, but with regard especially to the former affection, these alkaline waters act merely as palliatives, the symptoms sooner or later recurring when their use is discontinued. On this account they are far inferior to such waters as those of Carlsbad, which belong to a class to be next described. When taken by gouty persons the alkaline waters, *e.g.* of Vichy, neutralise the *materies morbi*, but have little, if any, influence in checking its formation. The Carlsbad waters, on the other hand, while neutralising the offending material, act likewise upon those organs which are concerned in its production in such a manner that its formation is decidedly checked.

The next class of waters, those which contain the sulphates of soda and magnesia, is now represented in England chiefly by the springs of Cheltenham and Leamington, though there are many others

which contain these salts. Springs at Epsom, Streat-ham, and Dulwich were very highly thought of in the last century. Nowadays we import large quantities of weaker waters, such as Püllna, Friedrichshall, Hunyadi Yanos, &c. These are highly useful in many cases. The Carlsbad waters, already referred to, contain beside sulphates, the carbonate of soda, and are therefore more suitable for many cases than those just mentioned.

The last class of waters which require notice is not a numerous one. It contains those springs of which the chief mineral constituents are the carbonates and sulphates of lime and magnesia. We have no representative of this class in England; abroad, the best known springs are those of Bag-nères de Bigorre, Contrexeville, and Wildungen. They are useful in some forms of indigestion, especially where acidity is a prominent symptom, and in some skin diseases. As baths their effects are due simply to the heat and the water. No absorption of the salts can be supposed to take place.

This necessarily imperfect sketch of health-resorts and their uses is sufficient to show that we have in such places remedial agencies of a very potent character. We must beware, however, of expecting

impossibilities and of falling into the mistake of supposing that the majority of ailments are curable by baths and waters. It is unfortunately impossible to obtain any statistics as to the results in the thousands of patients who annually visit baths and watering-places, either by the advice of physicians or prompted by their own ideas of what will be good for them. Favourable cases are of course published in the local handbooks; we hear nothing of the majority who fail to obtain relief. With regard to baths, it would seem at least probable that foreigners in general are more often benefited than Englishmen, to whom daily ablution is not such a novelty as it must be as a general rule to dwellers on the Continent. A glance at the utensils provided for washing in most continental hotels is sufficient to show the slight attention ordinarily paid to this important part of the toilet. Judging from the writer's experience, it is necessary to add that all patients hoping to derive real benefit from a health-resort should seek proper advice before resorting thither, and that, while there, should follow out to the letter the advice of the local physician. Unless his directions, trivial as they may seem, are attended to, the place and its resources will not have a fair trial. It

must be borne in mind that in not a few cases the improvement shows itself only after the patient has returned home. There is nothing surprising in this delay, as most of the ailments, for the relief of which recourse is had to bathing-places, are of a chronic nature, and do not admit of rapid cure. Lastly, when a health-resort has to be selected let it never be forgotten that our country possesses many places of this character, and in no respect second to those to be found abroad.





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